

## **Discovery of Superconductivity - Historical and Physical Perspective**

**Chandra Varma**

**Dickson Professor -2026, University of California, Riverside**

I will set the scene for the surprising discovery of Superconductivity in 1911, and the simultaneous (but not realized) phenomena of Superfluidity, by relating what was known and considered important to discover, and what was unknown in the bubbling but un-fermented prior decade. I will talk about the confusion of great minds when the essential physics, without which these phenomena could not be understood, was yet to be discovered. Yet with the right attitude and great leaps of imagination, some of them made remarkable and enduring contributions, which survive the full understanding which arrived only in the 1950s and 1960s. Such an understanding has affected everything subsequent in physics from nuclear physics to particle physics to cosmology.